FIG. 47A-75

C1521 Probe Set	FRET/TARGET SET 2	
p	5'-CTCTCTCGTCTCGGGAGGGTAATAATAAGG-NH2-3'	2450
i	5'-GCTGCCTTTTCAATAATCTTATCGAAC-3'	2451
a	3'NH2-**AGCAGAGCCCTCCCATTATTATTCC**-5'	2452
C2667 Probe Set	FRET/TARGET SET 2	
p	5'-CTCTCTCGTCTCGTTGTATTCTTTAAGCCAG-NH2-3'	2453
i	5'-CGGTCCAGGTCATCCCCAGAC-3'	2454
a	3'NH2-**AGCAGAGCAACATAAGAAATTCGGTC**-5'	2455
G537 Probe Set	FRET/TARGET SET 2	
p	5'-CTCTCTCGTCTCCTCTGGTGGATATGTTTG-NH2-3'	2456
i	5'-CTAAGTTTTCAGGGATGGATGGTTCATGC-3'	2457
a	3'NH2-**AGCAGAGGAGACCACCTATACAAAC**-5'	2458
T3192 Probe Set	FRET/TARGET SET 2	
p	5'-CTCTCTCGTCTCAACTGTGTGGGC-NH2-3'	2459
i	5'-TTAAGATCTGTAGTCTTTCCGAAC-3'	2460
a	3'NH2-**AGCAGAGTTCACACACCCG**-5'	2461
Cartilage-derived morphogenic protein 1, human (h-CDMP1)		
A831 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCTCCTGTTGCCTCCC-(biotin)-3'	2462
l	5'-AGCCTCCAACTTCACGCTGT-3'	2463
a	5'-**GGGAGGCAACAGGAGGCG**-(biotin)-3'	2464
A1691 Probe Set	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3'	2465
l	5'-ACACCACGTTGTTGGCAGAGTCAAG-3'	2466
a	5'-**CCATCAGCATCCTCTTCAGTGATCTCGG**-(biotin)-3'	2467
b-actin, rat (r-bACT)		
C1671 Probe Set (longer)	FRET/TARGET SET 6	
p	5'-CCGTCACGCCTCGCCTTAGGGTTCA-NH2-3'	2468
l	5'-TCTGGGTCATCTTTTCACGGTTGA-3'	2469
a	3'-**GCGGAGCGGAATCCCAAGT**-5'	2470
s	5'-**GAGGGGCCTCGGTGAGC**-3'	2471

FIG. 47A-76

Bile Salt port Pump, rat (r-BSEP)
p
p
l
a

G1288 Probe Set
p
l
a

A790 Probe Set
p
l
a

Nitric Oxide Synthase 2A, human (h-iNOS2)
A3418 Probe Set
p
l
a

Neutral Carboxy Ester Hydrolase, human (h-NCEH)
A1221 Probe Set
p
p
i
s

A1221 Probe Set
p
p
i
a
s

FRET/TARGET SET 5
5'-CCGCCGAGATCACGAGTTCTTGCCTTTC-(biotin)-3' 2472
5'-CCGCCGAGATCACGAGTTCTTGCCTTTC-NH3-3' 2473
5'-TTCACACACGCTTTTCCTGGTATCTCC-3' 2474
3'-(biotin)-**CTAGTGCTCAAGAACGGAAAG**-5' 2475

FRET/TARGET SET 2
5'-CTCTCTCGTCTCCCAGAAGGCCAGT-(biotin)-3' 2476
5'-TTCTTCATCTAGGACAAGTGTGGAACCATAA-3' 2477
5'-**ACTGGCCTTCTGGGAGACG**-(biotin)-3' 2478

FRET/TARGET SET 6
5'-CCGTCACGCCTCTTTCCTCATTCTCCT-(biotin)-3' 2479
5'-CCCAATTTCCATTCTCATTATTCTCCGGAAGTAAATC-3' 2480
5'-**AGGAGAATGAGGAAAGAGGCG**-(biotin)-3' 2481

FRET/TARGET SET 6
5'-CCGTCACGCCTCTGTCTTTCTTCGC-(biotin)-3' 2482
5'-GCTGCACCGCCACCCC-3' 2483
5'-**GCGAAGAAAGACAGAGGCG**-(biotin)-3' 2484

FRET/TARGET SET 7
5'-AACGAGGCGCACTCTTCTTATTCTCCTG-B-3' 2485
5'-AACGAGGCGCACTCTTCTTATTCTCCTG-NH2-3' 2486
5'-GTCTCAAAGTCCACCACAGTCTC-3' 2487
5'-**CAGGAGAATAAGAAGAGTGCGC**-(biotin)-3' 2488

FRET/TARGET SET 6
5'-CCGTCACGCCTCTCTTCTTATTCTCC-3' 2489
5'-CCGTCACGCCTCTCTTCTTATTCTCC-NH2-3' 2490
5'-GTCTCAAAGTCCACCACAGTCTC-3' 2491
3'-**GCGGAGAGAAGAATAAGAGG**-5' 2492
5'-**TGGGATGGGTCCTGGGC**-3' 2493

FIG. 47A-77

C1309. Probe Set

FRET/TARGET SET 8

p	5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3'	2494
i	5'-**CAGGTAGGCG**TAGGTCTTGA-3'	2495
a	3'-NH2-**CGTCCAAACCGTGAGAACCGTAA**-5'	2496
s	5'-**GGCTCTGTGCTGGGCTA**-NH2-3'	2497

Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_)

G1480 Probe Set

FRET/TARGET SET 6

p	5'-CCGTCACGCCTCCCGACTCCGTCT-(biotin)-3'	2498
l	5'-CGGGTGCAGCGCAGCATT-3'	2499
a	5'-**AGACGGAGTCGGGAGGCG**-(biotin)-3'	2500

A1044 Probe Set

FRET/TARGET SET 6

p	5'-CCGTCACGCCTCTGTCACTTGATCGTTCT-(biotin)-3'	2501
i	5'-TGGCCTCATAAACTCCGTATTTTAGCAAG-3'	2502
a	5'-**AGAACGATCAAGTGACAGAGGCG**-(biotin)-3'	2503

C 1311 Probe Set

FRET/TARGET SET 6

p	5'-CCGCCGAGATCACGTGTCCTACGTTTAGAAG-(biotin)-3'	2504
i	5'-CACATGTACAATACCCTCCTGCATTTTTTCAATC-3'	2505
a	5'-**CTTCTAAACGTAGGACACGTGATCTCGG**-(biotin)-3'	2506

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR_)

A595 Probe set

FRET/TARGET SET 6

6B. Designed truncated probe and stackers to reduce temperature

p	5'-CCGTCACGCCTCTCTTCTGAATCTTGC-3'	2507
l	5'-CTGGCACTTGTTGCGGTTCTA-3'	2508
a	3'-NH2-**GCGGAGAGAAGACTTAGAACG**-5'	2509
s	5'-**AGCTGCGCTCACACTTCTCGT**-3'	2510

FRET/TARGET SET 6

6C. Design for new INVADER assay with 50% 2'-Me.

p	5'-CCGTCACGCCTCTCTTCTGAATCTTG-NH2-3'	2511
i	5'-**CTGGCACTTGTT**GCGGTTCTA-3'	2512
a	3'-NH2-**GCGGAGAGAAGACTTAGAAC**-5'	2513
s	5'-**CAGCTGCGCTCACACTTCTCGT**-NH2-3'	2514

FIG. 47A-78

6D. Truncate probe.
p
i
s

FRET/TARGET SET 6
5'-CCGTCACGCCTCTCTTCTGAATCTT-NH2-3' 2515
5'-**CCTGGCACTTGTT**GCGGTTCTA-3' 2516
5'-**GCAGCTGCGCTCACACTTCTCGT**-NH2-3' 2517

C891 Probe Set
p
i
a
s

FRET/TARGET SET 7
5'-AACGAGGCGCACGGTAGGCATTGTAGA-3' 2518
5'-CCTTCTTTTTGGTCATGTTGAAGTTTTTCAC-3' 2519
3'-**CGCGTGCCATCCGTAACATCT**-5' 2520
5'-**TGTGCTTGGAGAAGGCCTTCA**-3' 2521

Substance P, rat (r-SubP)
C344 Probe Set
p
l
a
s

FRET/TARGET SET 6
5'-CCGTCACGCCTCGCCACTTGTTTTTCA-NH2-3' 2522
5'-CCATGCCCATAAAGAGCCTTTAACAGGA-3' 2523
3'-NH2-**GCGGAGCGGTGAACAAAAAGT**-5' 2524
NO STACKER

A396 Probe Set
p
i
a
s

FRET/TARGET SET 6
5'-CCGTCACGCCTCTTTATGCCTTTTGTGA-NH2-3' 2525
5'-TGCCCATTAGTCCAACAAAGGAATCTGTA-3' 2526
3'-GCGGAGAAATACGGAAAACACT-5' 2527
5'-GAGATCTGACCATGCCCATAAAGAGCC-NH2-3' 2528

C752 Probe Set
p
i
a
s

FRET/TARGET SET 7
5'-AACGAGGCGCACGCTGGCAAACTTGT-NH2-3' 2529
5'-CCTTTCTGTCTTTGGAGACTTGCATCA-3' 2530
3'-NH2-**CGCGTGCGACCGTTTGAACA**-5' 2531
5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3' 2532

Hepatic Lipase, human (h-LIPC)
A830 Probe Set
p
l
a
s

FRET/TARGET SET 7
5'-AACGAGGCGCACTCTAGGAAGTGGCA-NH2-3' 2533
5'-**GTGCTGGGCAATATGTCT**GTAGAGCG-3' 2534
3'-NH2-**CGCGTGAGATCCTTCACCGT**-5' 2535
5'-**GCCAGGCTGGAAGGAGC**-NH2-3' 2536

C1154 Probe Set

FRET/TARGET SET 5

FIG. 47A-79

p	5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'	2537
i	5'-CGAGTAGTGACATGGTAAAAGTTGTTTGTATTGGCT-3'	2538
a	3'-NH2-**CTCTAGTGGCAGAGTCAAACCA**-5'	2539
Hepatic Lipase, rat (r-LIPC)		
G357 Probe Set	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACCACGTTCACGGGTT-NH2-3'	2540
i	5'-**GGGAGATCCAGTCC**ACTAATCCA-3'	2541
a	3'-NH2-**TCTAGTGGTGCAAGTGCCCAA**-5'	2542
s	5'-**GGGACTGTCGGGACTTCAGG**-NH2-3'	2543
C1167 Probe Set	FRET/TARGET SET 8	
p	5'-GAACGGCAGGTTTGGGGAATTTTCTTTATTTCTT-NH2-3'	2544
i	5'-**ATTCCTTCGCCC**AGGGTGATG-3'	2545
a	3'-NH2-**GTCCAAACCCCTTAAAAGAAATAAAGAA**-5'	2546
s	5'-**CTTTTGTCCCCAGCAGTGT**-NH2-3'	2547
Metabotropic Glutamate Receptor 2, rat (r-mGluR2)		
C1403 Probe Set	FRET/TARGET SET 7	
p	5'-AACGAGGCGCACGGTGGTGTTGGGA-NH2-3'	2548
l	5'-**GCCTCATAGCATCG**CAGAGGTGT-3'	2549
a	3'-NH2-**CGCGTGCCACCACAACCCT**-5'	2550
s	5'-**CAGAGGGCACGGTGCATGTTGT**-NH2-3'	2551
G-protein coupled receptor 2, rat (r-ETBR-LP2)		
A1629 Probe set	FRET/TARGET SET 8	
p	5'-GAACGGCAGGTTTGTCAGCAGACCGC-NH2-3'	2552
l	5'-**GAGAGGCCAAAGTGAGACCATG**TGAAAGAAA-3'	2553
a	3'-NH2-**CGTCCAAACAGTCGTCTGGCG**-5'	2554
s	5'-**CATGGATCGGCATGGCCCC**-NH2-3'	2555
i kappa b alpha, human (h-MAD3)		
C542 Probe Set	FRET/TARGET SET 7	
p	5'-AACGAGGCGCACGGTGTAGGGGGG-(biotin)-3'	2556
l	5'-GCCCTGCTCACAGGCAAT-3'	2557
a	5'-**CCCCCCTACACCGTGCGC**-(biotin)-3'	2558
C363 Probe Set	FRET/TARGET SET 6	

FIG. 47A-80

P	5'-CCGTCACGCCTCGTCAGTGCCTTTTC-(biotin)-3'	2559
I	5'-CACCTGGCGGATCACTTCCATGT	2560
A	5'-**GAAAAGGCACTGACGAGGCG**-(biotin)-3'	2561
G953 Probe Set	FRET/TARGET SET 6	
P	5'-CCGTCACGCCTCCCTCATCCTCACT-(biotin)-3'	2562
I	5'-ACTCTGACTCTGTGTCATAGCTCTT	2563
A	**5'-AGTGAGGATGAGGGAGGCG-(biotin)-3'**	2564
C923 Probe Set	FRET/TARGET SET 7	
P	5'-AACGAGGCGCACGGTTTTCTAGTGTCA-NH2-3'	2565
I	5'-**CTCACTCTCTGGCAGC**ATCTGAAT-3'	2566
A	**3'-NH2-CGCGTGCCAAAAGATCACAGT-5'**	2567
S	**5'-GCTGGCCCAGCTGC-NH2-3'**	2568
Lecithin cholesterol acyltransferase, human (h-LCAT)		
C821 Probe Set (truncated Probe Design)	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'	2569
I	5'-**CCAGGGG**GAGGTGGTC-3'	2570
a	3'-NH2-**TCTAGTGCCAATACGCGACG**-5'	2571
s	5'-**CTCCTCTTTCAGCTTGATGCTGG**-NH2-3'	2572
C827 Probe Design	FRET/TARGET SET 8	
p	5'-GAACGGCAGGTTTGGGTGGTGGTTATGCG-NH2-3'	2573
I	5'-**AGAGGGAAACATC**CAGGGGGAG-3'	2574
a	3'-NH2-**CGTCCAAACCCACCACCAATACGC**-5'	2575
C1217 Probe Design	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACGAGATGCTGTATCCC-NH2-3'	2576
I	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2577
a	3'-NH2-**TCTAGTGCTCTACGACATAGGG**-5'	2578
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCTCTGAGCACATCCACG-NH2-3'	2579
I	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2580
a	**3'-NH2-GCGGAGACTCGTGTAGGTGC-5'**	2581
s	**5'-TACACAGTGGCCAGGTCCTT-NH2-3'**	2582

FIG. 47A-81

A227 Probe Set (titrate length of 2'-O-Me in Invader)

p
l
i
i
A
s

FRET/TARGET SET 8

5'-GAACGGCAGGTTTGTCCCAAGGCGG-NH2-3'	2583
5'-**GTCAAGGAGCTTT**AGGTTTAGCTGTTTA-3'	2584
5'-**GTCAAGGATCTTTAGGTTTA**GCTGTTTA-3'	2585
5'-**GTCCCAGTTGTCAAGGATCTTTAGGTTTA**GCTGTTTA-3'	2586
3'-NH2-GTCCAAACAGGGTTCCGCC-5'	2587
5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3'	2588

G350 Probe Set

p
l
a
s

FRET/TARGET SET 5

5'-CCGCCGAGATCACTTCTGTCTCCTT-NH2-3'	2589
5'-CTCCTGCCTCAGGCCG-3'	2590
3'-NH2-**TCTAGTGGAGACAGAGGAA**-5'	2591
5'-**TTCCAGGTTATCCCAGAACTCC**-NH2-3'	2592

G233 Probe Set

p
l
a
s

FRET/TARGET SET 11

5'-AGAACGGCAGTCTTTCTGTTTTCCCAAGG-NH2-3'	2593
5'-**CCAGTTGTCAAGGAGCTTT**AGGTTTAGT-3'	2594
3'-NH2-CGTCAGAAAGACAAAAGGGTTCC-5'	2595
5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3'	2596

Metabotropic Glutamate Receptor 1, rat (r-mGluR1)
T934 Probe Set

p
l
a
s

FRET/TARGET SET 11

5'-AGAACGGCAGTCTTTAGAATAGGCGATCTGT-NH2-3'	2597
5'-CACTCAGGTCTATGCTTGTGGCT-3'	2598
3'-NH2-GTCAGAATCTTATCCGCTAGACA-5'	2599
5'-GGGATGTCGAACAGCTGGAGAAGATTCT-NH2-3'	2600

Ubiquitin, human (h-UBIQ)
G119 Probe Set (MO4 Arm)

p
l
a

FRET/TARGET SET 6

5'-CCGTCACGCCTCCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2601
5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2602
3'-(biotin)-GCGGAGGAAATGTAAAAGATAGCATAGGC-5'	2603

G119 Probe Set

p
i
a

FRET/TARGET SET 5

5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2604
5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2605
3'-(biotin)-CTAGTGGAAATGTAAAAGATAGCATAGGC-5'	2606

FIG. 47A-82

G131 Probe Set	FRET/TARGET SET 9	
p	5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'	2607
l	5'-GCTGATCAGGAGGAATTCCTTCCTTATCT-3'	2608
a	**3'-(biotin)-GCCTGACCTAGAACCGG-5'**	2609
Scanned G119 region (ELISA format (No Arrestors)		
p	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCGA-NH2-3'	2610
p	5'-CTCTCTCGTCTCTTTACATTTTCTATCGTATCCG-NH2-3'	2611
p	5'-CTCTCTCGTCTCCTTTACATTTTCTATCGTATCCG-NH2-3'	2612
p	5'-CTCTCTCGTCTCCCTTTACATTTTCTATCGTATC-NH2-3'	2613
p	5'-CTCTCTCGTCTCGCCTTTACATTTTCTATCG-NH2-3'	2614
l	5'-GGAATTCCTTCCTTATCCTGGATCTTGA-3'	2615
i	5'-GGAATTCCTTCCTTATCCTGGATCTTGGC-3'	2616
i	5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2617
i	5'-TTCCTTATCCTGGATCTTGGCCA-3'	2618
i	5'-TCCTTATCCTGGATCTTGGCCTA-3'	2619
Ubiquitin, mouse (m-UBIQ)		
G294 Probe Set	FRET/TARGET SET 7	
p	5'-CCGTCACGCCTCCCTTCTGGATGTTGTA-(biotin)-3'	2620
l	5'-CCAGGTGCAGGGTTGACTA-3'	2621
a	**3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5'**	2622
G294 Probe Set	FRET/TARGET SET 5	
p	5'-CGCCGAGATCACCCTTCTGGATGTTGTA-(biotin)-3'	2623
l	5'-CCAGGTGCAGGGTTGACTA-3'	2624
a	**3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'**	2625
G294 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCTCCCTTCTGGATGTTGTAAT-NH2-3'	2626
l	5'-CCAGGTGCAGGGTTGACTA-3'	2627
a	**3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'**	2628

FIG. 47A-83

G294 Probe Set
p
i
a

FRET/TARGET SET 6
5'-CCGTCACGCCTCCCTTCTGGATGTTGTAATC-NH2-3' 2629
5'-CCAGGTGCAGGGTTGACTA-3' 2630
3'-NH2-**GCGGAGGGAAGACCTACAACATTAG**-3' 2631

T514 Probe Set
p
i
a

FRET/TARGET SET 7
5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3' 2632
5'-TGCAGGGTTGACTCTTTCTGGA-3' 2633
3'-NH2-CGCGTGTACAACATTAGTCTCTCCC-5' 2634

G750 Probe Set
p
l
a

FRET/TARGET SET 9
5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3' 2635
5'-GGACCAGGTGCAGGGTTGACTT-3' 2636
3'-NH2-GCCTGGAAGACCTACAACAT-5' 2637

G185 Probe Set
p
l
a

FRET/TARGET SET 9
5'-CATCTTCGCGGACTTCACGTTCTCGATGG-NH2-3' 2638
5'-CCCTCTTTATCCTGGATCTTGGCA-3' 2639
3'-NH2-GCGCCTGAAGTGCAAGAGCTACC-5' 2640